

Application No.: 10/669,153

Docket No.: JCLA12271

**REMARKS****Present Status of the Application**

The specification was objected to for not supporting Claim 1, lines 17+; Claim 11/I was objected to because "said receiving section" in line 2 lacks sufficient antecedent basis. Claim 19 was rejected under 35 U.S.C. 112 as not supported by the specification, and Claims 1, 3, 11 and 19 rejected under the same for some terms are indefinite. Claims 1, 11 and 19 were rejected under 35 U.S.C. 102(b) as being anticipated by Welschhof et al. (US 3,879,960), and Claims 1, 3, 11 and 19 rejected under the same as being anticipated by Hartz et al. (US 5,453,052). The Office Action also stressed that Claim 5 does not belong to Species I that includes Claims 1, 3, 11 and 19.

In response, Applicants have amended Claims 1 and 11 for clarification and submitted the following remarks. It is believed that the amendments made to claims 1 and 11 do not raise new issue. Reconsideration of Claims 1, 3, 11 and 19 and Claim 5 is respectfully requested.

**Discussion of Objection to Specification**

The Office Action mentioned, in pages 2, that the detailed description of the specification of the elected species fails to provide proper antecedent basis for the subject matter in claim 1, lines 17+.

Applicants have mentioned in the previous response that the feature in Claim 1, lines 17+ is mentioned in the Summary of the specification, but Examiner considered that the feature should also be described in the Detailed Description. Applicants respectfully

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point out that the feature is also described in page 15, line 16 to page 16, line 5 of the Detailed Description, though in a slightly different wording.

Specifically, the description of "*The inner cylindrical surface 18 of the cage 3 has an inner diameter  $D_3$  coinciding with the outer diameter  $D_1$  of the joint inner ring 2, as shown in Fig. 4 (a) and (b), thus allowing the joint inner ring 2 to pass therethrough*" in page 15, lines 23-27 can support the description of "*the region located rearwardly of the axial center is capable of allowing the axial movement of the joint inner ring*" in Claim 1, because the passing of the joint inner ring through the cage is namely an axial movement of the same. According to Fig. 1(a), the joint inner ring 2 can pass through the cage 3 *only in the axial direction* of the fixed type constant velocity joint.

Meanwhile, the description of "*the outer spherical surface 12 of the joint inner ring 2 is in abutment against the inner spherical surface 17 of the cage 3*" in page 16, lines 3-5 can support the description of "*the region located forwardly of the axial center is capable of controlling the forward movement of the joint inner ring*" in claim 1, since the abutment region is located forwardly of the axial center (center of the fixed type constant velocity joint) and the abutment-type arrangement of the joint inner ring and the cage can control the forward movement of the joint inner ring, as shown in, for example, Fig. 1(a).

Nevertheless, Applicants have amended the specification by adding a new paragraph substantially corresponding to the subject matter of Claim 1, line 17<sup>+</sup>.

#### Discussion of the Objection to Claim 1/11

The Office Action mentioned in Page 2 that "said receiving section" in line 2 [of Claim 11] lacks sufficient antecedent basis. Applicants have noted that Claim 11 is

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dependent from Claim 1 or 3 but only Claim 3 mentions "*a receiving section*". Therefore, Applicants have restricted Claim 11 to depend on Claim 3 only, and respectfully request withdrawal of the objection.

**Rejection to Claim 19 under 35 U.S.C. 112, First Paragraph**

The Office Action indicated on page 3 that, the limitations in Claim 19 concerning the relative position of "O<sub>1</sub>" or "O<sub>2</sub>" to "O" are contradictory to those described on page 14, lines 15-17 and 21-23 of the specification.

In response, Applicants have amended the paragraph on page 14, lines 10-27, to clarify the invention. Support for the amendment can be found in Fig. 1(a). Therefore, Claim 19 is supported by the original disclosure.

**Rejections to Claims 1, 3, 11 & 19 under 35 U.S.C. 112, Second Paragraph**

Claims 1, 3, 11 and 19 were rejected under 35 U.S.C. 112, second paragraph, for some terms are indefinite. In response, Applicants have

- a) replaced the phrase "*an joint center*" in Claim 1 with "*a center of the fixed type constant velocity joint*";
- b) amended "*the track groove in the joint outer ring*" as "*each of the track grooves in the joint outer ring*";
- c) defined "*a mouth innermost side*" as "*a mouth innermost side of the joint outer ring*";
- d) amended "*the track groove in the joint inner ring*" as "*each of the track grooves in the joint inner ring*";
- e) defined "*a mouth opening side*" as "*a mouth opening side of the joint outer ring*";

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f) amended "*a region located forwardly/rearwardly*" as "*a first/second region of the cage located forwardly/rearwardly*"; and

g) amended "*an axial center*" as "*the center of the fixed type constant velocity joint*" because the two terms are equivalent.

In view of the above amendments, withdrawal of the rejections is requested.

**Discussion of Rejections under 35 USC 102(b)**

Claims 1, 11 and 19 were rejected as being anticipated by Welschof et al., and Claims 1, 3, 11 and 19 were rejected as being anticipated by Hartz et al, wherein Claims 3, 11 and 19 are dependent from independent Claim 1.

One feature of Claim 1 is that the joint outer ring has a rear *open* end that has an inner diameter *larger* than an outer diameter of the joint inner ring. Please also note that the rear open end of the joint outer ring is *opposite to* the mouth opening side of the same, *as defined in the specification and the drawings of this invention*.

Welschof et al. fails to disclose the above feature. According to the definition of this invention, the joint outer ring 2 in Fig. 1 of Welschof et al. does not even have a rear *open* end, because the rear end thereof, which is opposite to the mouth opening side for insertion of the shaft 3, has a *closed* spherical surface. That is, the joint outer ring 2 in Welschof et al. has a rear *closed* end but not a rear *open* end.

Hartz et al. also fails to disclose the above feature of Claim 1. Please refer to any of Figs. 1-6 of Hartz et al., the joint outer ring of each joint structure does have a rear open end, but the inner diameter of the rear open end of the joint outer ring is apparently *smaller* than the outer diameter of the joint inner ring, as being contrary to the case of Claim 1.

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For at least the above reasons, Applicants respectfully submit that independent Claim 1 and its dependent Claims 3, 11 and 19 patently define over the cited prior art.

**Further Discussion for the Necessity of Withdrawing Claim 5**

The Office Action stated on Page 7 that only Fig. 17 shows the limitations of claim 5 (the curvature radius of the outer spherical surface of the joint inner ring *smaller* than that of the inner spherical surface of the cage), and elected Species I is expressly disclosed at page 15, line last to page 16, line 5 as having a structure which does not read on the limitations in claim 5. Applicants respectfully disagree with this assertion for the reasons set forth.

The words in page 15, line last to page 16, line 5, "*since the inner spherical surface 17 of the cage 3 coincides with the outer spherical surface 12 of the joint inner ring 2 when the joint inner ring 2 is in its normal position, the outer spherical surface 12 of the joint inner ring 2 is in abutment against the inner spherical surface 17 of the cage 3*", merely indicates that the inner spherical surface of the cage *contacts with* the outer spherical surface of the joint inner ring. In Fig. 1(a) corresponding to page 15, line last to page 16, line 5, the radius of curvature of the outer spherical surface of the joint inner ring is apparently *smaller* than that of the inner spherical surface of the cage, *just as in the cases of Claim 5 and Fig. 17*. Hence, Claim 5 belongs to elected Species I that includes Claims 1, 3, 11 and 19, and should not be withdrawn from consideration.

Moreover, the structure in Fig. 17 is different from that in Fig. 1(a) *in other aspects*, and therefore belongs to another Species.

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**CONCLUSION**

For at least the foregoing reasons, it is believed that the pending Claims 1, 3, 11 and 19 are in proper condition for allowance and Claim 5 dependent from Claim 3 should *not* be withdrawn from elected Species I but should be in proper condition for allowance like Claims 1, 3, 11 and 19. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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